IRID 110

AR5 V.2 DISASSEMBLY INSTRUCTIONS

Important Note

Units are static sensitive. Observe care when installing/servicing. Retain original packaging for returns/service.

Test mode

- Set address wheels to "00"
- Power up
- Unit will cycle
- To stop test, set wheels to any address
- Unit will sit in last state
- Reset address to "00" for three seconds to stop test and then re-address.

Yoke Section

CPU removal

- Open door.
- Remove only visible screw.
- Pull off cover.
- Disconnect motor harnesses
  - Blue, Amber, Magenta, Option, Tilt.
- Remove remaining three screws.
- Pull out CPU and remove remaining connectors
  - Pan. Power, Data.
- Test Points
  - C23 +5VDC
  - C24 +15VDC

Tilt motor belt replacement

- Requires unsoldering or pin removal of igniter board wires.

Tilt motor replacement

- Slip drive belt off pulley
- Pry retainer off post at motor
- Pull out motor assembly.
- On re-assembly, press motor against spring clip to move shaft closer to pulley to allow drive belt to be installed more easily.

Tilt tube assembly replacement

- Remove belt and disconnect all wires.
- Carefully compress opposing fingers while gently prying pulley up.
- Maintain pressure against pulley while compressing other 2 fingers
- Pulley should come off.
- Separate pulley flange, bearing sleeve and bearing assemblies.
- Please note that tilt tube and axle side body are one piece. Breaking tube will require complete re-assembly of tilt tube with new part.
- Cardboard collars must be installed for transporting unit for same reason

Tilt Tube Section

Remove lens cap

Open rear of tilt tube and remove lamp
- Slide clip over carefully
- Pull socket straight out
- Check socket and reflector part of socket for breakage
- Point out interlock

Tilt Tube disassembly
- Place unit on side
- Remove 4 screws
- Flip unit over so yoke is on table.
- Pull Body Cover off
- Remove door to rear enclosure

Color bulkhead removal
- Order of bulkheads B-A-M-Option.
- Light blocker sleeve is for white units only.
- Flip linear actuator out of clip on color bulkhead.
- Close filters to prevent damage.
- Lift bulkhead off pins
  - Check gears for heat damage. Blue filter is the most common filter with this damage
- V.1 and V.2 bulkheads are different.V.2 may fit in a V.1

Linear Actuator removal
- Disconnect appropriate connector from CPU
- Route wire harness through yoke.
- Apply pressure to locking tabs on motor and pull out motor using shaft.
- Actuators are not the same. Wire length and shaft are different depending on position. Use direct replacement.

Igniter board removal
- Unsolder 2 wires to igniter board. Alternately, use pin removal tool to remove pins from connector and route through yoke.
- Igniter boards on V.1 have surface mount capacitors that may go bad.
- V.1 igniter boards may have been heat staked Use soldering iron to reform posts.
- V.2 igniter boards go into V.1s. V.1s no longer sold.

Upper Enclosure

3 ways to wire

- Top entry
- Side entry
- Connectorized
  - Remove exposed 4 screws that attach mounting plate to luminaire
  - Will hang from hook.

Data Connections

- Check that data ground is not attached to case
- Data Comm board
  - To remove, you must disconnect harnesses

APS (Arc Power Supply)

- Power for lamp.
- Not connected to the board below.
- Pull 3 connectors
- Remove 4 screws from heat sink
- Remove 2 screws from APS PCB
- Remove 1 screw from PFS PCB
- Pull out from unit.
- Pot adjusts 110/220 input voltage.
- Fuses for input power
  - If fuse blows, it does not draw down caps – you will get zapped
- LED is for lamp strike timeout or power fault
- Heat sink gets HOT!
  - Make sure there is good mechanical connections to chassis
  - Limiting resistor gets very hot

PFS (Power Factor Supply)

- Connects to APS with 2 connectors
- Different for 110 and 220
- Fuse – Input power
- Pot – High Buss voltage

Pan Motor

- Same as tilt motor.

Get it back together!

Test!

Common problems

- APS Goes out
  - Can take PFS with it
- Old igniter boards on V.1